ABSTRACT OF THE DISCLOSURE

Composite oxide powder has a large specific surface area and a large pore volume even after a high-temperature durability test, without losing oxygen storage ability of a single metal oxide. In this composite oxide powder, a first metal oxide having oxygen storage ability is held as ultrafine particles in the form of islands by a second metal oxide which is different from the first metal oxide, pore volume is not less than 2 cc/g and the first metal oxide particles have a diameter of not more than 30 nm even after subjected to high temperature of 900 °C or more. Since the first metal oxide particles are held in the form of islands by the second metal oxide particles, separated from each other and suppressed from contacting each other, the first metal oxide particles hardly grow granularly.